

## CLAIMS

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is as follows:

- 1 1. A method of pre-processing image data, said  
2 method including steps of  
3       applying luminance and chrominance data of  
4       consecutively presented lines of data to respective  
5       data inputs of a filter, and  
6       applying hybrid filter coefficients to said  
7       filter to concurrently obtain spatially filtered and  
8       chrominance converted data.
- 1 2. A method as recited in claim 1, wherein said  
2 consecutively presented lines are lines of a  
3 progressive scan format.
- 1 3. A method as recited in claim 1, wherein said  
2 consecutively presented lines are lines of an odd  
3 field or an even field of an interlaced scan format.
- 1 4. A method as recited in claim 3, further  
2 including a step of  
3       altering said hybrid filter coefficients for  
4       respective ones of said odd field and said even  
5       field.

1       5. A method as recited in claim 1, further  
2 including a step of  
3             removing alternate lines of said chrominance  
4 converted data.

1       6. A method as recited in claim 1, including the  
2 further steps of  
3             multiplying said luminance and chrominance data  
4 by said hybrid filter coefficients for respective  
5 ones of said consecutively presented lines to  
6 produce weighted luminance and chrominance values,  
7 and  
8             summing said weighted luminance and chrominance  
9 values.

1       7. A pre-processing circuit for image data  
2 including  
3             a filter having inputs to receive luminance and  
4 chrominance data corresponding to consecutive image  
5 data lines, and  
6             means for applying hybrid filter coefficients  
7 to said filter such that spatially filtered and  
8 chrominance converted data are concurrently  
9 developed by said filter.

1       8. A pre-processing circuit as recited in claim 7,  
2 further comprising  
3             a buffer for storing said consecutive lines of  
4 said image data and outputting said image data to  
5 said filter.

1       9. A pre-processing circuit as recited in claim 7,  
2       wherein said consecutive image data lines correspond  
3       to a progressive scan format.

1       10. A pre-processing circuit as recited in claim 7,  
2       wherein said consecutive image data lines correspond  
3       to an odd field or an even field of an interlaced  
4       scan format.

1       11. A pre-processing circuit as recited in claim  
2       10, further including  
3              means for altering said hybrid filter  
4              coefficients for respective ones of said odd field  
5              and said even field.

1       12. A preprocessing circuit as recited in claim 7,  
2       further including  
3              means for sub-sampling said chrominance  
4              converted data.